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ABSTRACT

To determine if the ethnocentric perceptions of students would be influenced by participation in a 3-week social studies unit on "The Contributions of Minority Ethnic Groups to American Civilization," a study was made utilizing 114 students in five 12th grade social studies classes (three experimental and two control). The investigation attempted to gain insight into the processes of attitudinal change and to obtain information on the influence of sex, intelligence, and socioeconomic background on attitudinal change. Ten hypotheses were tested. A modified form of the California E Scale was given to all groups prior to the beginning of the study unit, and again three days following the completion of the unit. In addition, the experimental groups completed the Otis Quick-Scoring Mental Ability Tests, Gamma Test: Form C, 1939, and a personal information form. The statistical technique employed was the significance of the differences between means obtained from the same group upon two occasions (t-test). Results of the study were: (1) factual information favorable to minority ethnic groups lowered the expressed ethnocentric attitudes of the experimental groups; (2) both the high and low ethnocentric groups became more tolerant in the expression of their feelings toward members of minority ethnic groups; (3) the male population showed no attitudinal change, but the female population showed highly significant reduction in ethnocentrism; (4) expressed prejudicial attitudes toward minority groups were substantially reduced; and (5) the treatment induced an expressed significant reduction in ethnocentrism in the high socioeconomic group, but there was no significant attitudinal shift in the low socioeconomic group. Recommendations for future research are made. (DB)

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AN ANALYSIS OF THE INFLUENCE OF SEX, INTELLIGENCE, AND SOCIO-ECONOMIC BACKGROUND ON THE MODIFICATION OF ETHNOCENTRIC ATTITUDES

High school teachers, and especially teachers of the social studies, are often requested and occasionally pressured to teach lessons or units concerning various societal issues. The manifest objective of these requests, in many instances, is to influence attitudinal change in a specific direction.

An attitudinal frame of reference that has been of primary concern to social scientists and educators during the last three decades has been that of ethnocentrism. Ethnocentrism generally refers to group relations, specifically in the form of prejudice toward minority ethnic groups. The genocidal holocaust prior to and during World War II focused the attention of the world on ethnocentrism. This attention has continued to the present with the focal point of interest being social ills and unrest.

The paramount issue is whether an attitudinal frame of reference is forever bound to the individual's environmental background or if schools through structured learning experiences can change the effects of a specific milieu. A cursory review of the literature reveals that most attitudinal studies have been done in colleges. Therefore, the field of attitudinal change research on the secondary school level should be a significant facet of socio-psychological research.

Statement of the Problem

The problem was to determine whether a structured learning experience would produce a statistically significant change in the attitudes toward minority ethnic groups of a selected group of high school students as measured by a modified form of the California E Scale (Adorno, 1950).

Purpose of the Study

The dimension of the individual's psychological field that was the focal point of interest in the study was his perceptions of minority ethnic groups.

The specific intent of the study was an effort to determine if the ethnocentric perceptions of the subjects would be influenced as a result of participating in a three week social studies unit on "The Contributions of Minority Ethnic Groups to American Civilization."

The broad intent of the investigation was an effort to gain insight into the processes of attitudinal change and to ascertain information concerning the influence of factors such as sex, intelligence and socio-economic background on attitude change.

Hypotheses

Following is a formal statement of the ten hypotheses which were presented in null form for statistical purposes.

1. The attitudes toward minority ethnic groups of the subjects in Group A will show no statistically significant difference between the means of Test I and Test II.

2. The attitudes toward minority ethnic groups of the subjects defined as showing high ethnocentrism in Group A will show no statistically significant difference between the means of Test I and Test II.

3. The attitudes toward minority ethnic groups of the subjects defined as showing low ethnocentrism in Group A will show no statistically significant difference between the means of Test I and Test II.

4. The attitudes toward minority ethnic groups of the female subjects in Group A will show no statistically significant difference between the means of Test I and Test II.

5. The attitudes toward minority ethnic groups of the male subjects in Group A will show no statistically significant difference between the means of Test I and Test II.

6. The attitudes toward minority ethnic groups of the subjects defined as high IQ in Group A will show no statistically significant difference between the means of Test I and Test II.

7. The attitudes toward minority ethnic groups of the subjects defined as low IQ in Group A will show no statistically significant difference between the means of Test I and Test II.

8. The attitudes toward minority ethnic groups of the subjects defined as having high socio-economic backgrounds in Group A will show no statistically significant difference between the means of Test I and Test II.

9. The attitudes toward minority ethnic groups of the subjects defined as having low socio-economic backgrounds in Group A will show no statistically significant difference between the means of Test I and Test II.

10. The attitudes toward minority ethnic groups of the subjects in Group B will show no statistically significant difference between the means of Test I Test II.

Operational Terms

The terms listed below are defined as they were used in the study.

Group A. -- Experimental Group.

Group B. -- Control Group.

Test I. -- The modified form of the California E scale given to both the experimental and control group the first time, prior to the presentation of the unit.

Test II. -- The modified form of the California E scale given to both the experimental and control group the second time, after the completion of the unit.

High Ethnocentrism. -- A score above 80 on the modified form of the California E scale.

Low Ethnocentrism. -- A score of 80 or below on the modified form of the California E scale.

High IQ. -- Any I.Q. 100 and above.

Low IQ. -- Any IQ below 100.

High Socio-Economic Status. -- A subject whose socio-economic status falls in the upper half of his group, based on parents' or guardians' occupations, incomes, and housing patterns.

Low Socio-Economic Status. -- A subject whose socio-economic status falls in the lower half of his group, based on parents' or guardians' occupations, incomes, and housing patterns.

Procedure

Selection of the School

This investigation was conducted in the Palm Beach County Public School System, Palm Beach County, Florida. This school district was selected from among three districts under consideration because of its willingness to participate in the study and because it fulfilled the requirements necessary to conduct the study.

The specific school in which the experiment took place was Boca Raton Senior High School. This school was chosen on the basis of the interest expressed by its officials in such an investigation and their offer to cooperate in the collection of data. The superior reputation of their social studies department was also a factor in the selection of the school.

Selection of the Population

The population for the study was 114 subjects in five heterogeneously grouped twelfth grade social studies classes. Three classes were designated as Group A (experimental). The remaining two classes served as Group B (control).

All seniors were required to take social studies. There were eight heterogeneously grouped sections in all in the twelth grade. The availability of the participating teacher was the criterion used for selecting the target classes. This investigation did not include the authority to alter or regulate the class schedule or the assignment of teachers. Therefore, the classes previously assigned to the teacher selected to conduct the experiment were used in the study.

Collection of the Data

The experiment began the third week of the fall semester. It was felt that the first two weeks of school were needed to allow students to make schedule changes, which would provide for more class stability during the experiment.

Test I was administered to Group A and Group B three days prior to the beginning of the treatment. Group A was then taught a three weeks unit on "The Contributions of Minority Ethnic Groups to American Civilization." Three days after the completion of the unit Test II was administered to Group A and Group B.

Data collected on subjects who were classified as members of minority ethnic groups, and who did not complete the tests according to the scoring directions, were omitted from the study. These omissions are illustrated in Table I.

TABLE 1

DATA COLLECTED ON SUBJECTS THAT WERE NOT USED IN THE INVESTIGATION

	Group A	Group B
Total Subjects	75	39
Minority Ethnic Subjects	3	2
Subjects with Incomplete Tests	1	1
Subjects Used in the Study	71	36

Each subject's mental age in Group A was measured by the Otis Quick-Scoring Mental Ability Tests, Gamma Test: Form C, 1939. There were fifty-seven subjects with IQ's of 100 and above who were operationally defined as the high IQ group. The tests indicated fourteen subjects were below the 100 level and they were classified as the low IQ group.

High and low socio-economic status was determined by having the subjects in Group A complete a personal information form in which the parents' or guardians' occupations were obtained. In order to acquire the socio-economic groups, the subjects were ranked from high to low based on the occupational and economic status of their parents or guardians. The subjects were divided at the median into a high group and a low group. The "median" subject was dropped from the analysis. This resulted in a membership of thirty-five subjects in each group. The guidance department provided assistance in categorizing the subjects into socio-economic groups.

There were fifteen subjects in Group A who scored above eighty on Test I and were characterized as displaying high ethnocentric tendencies. The

fifty-six who scored eighty and below on Test I were categorized as the group showing low ethnocentrism.

There were thirty-six male subjects and thirty-five female subjects in Group A. These subgroup totals are presented in Table 2.

TALBE 2

MEMBERSHIP OF IQ, SOCIO-ECONOMIC, ETHNOCENTRIC MALE AND FEMALE SUBGROUPS WITHIN GROUP A

IQ Subgroups		Socio-Economic Subgroups		Ethnocentric Subgroups		Male Subgroup	Female Subgroup
High	Low	High	Low	High	Low		
57	14	35	35	15	56	36	35

Treatment of the Data

The statistical technique that was employed to test the null hypotheses was the significance of the differences between means obtained from the same group upon two occasions (t-test).

A difference was considered statistically significant at the .05 level of significance.

Selection of the Teacher and the Development and Presentation of the Unit

The participating teacher was selected on the recommendation of the target school principal. He was chairman of the social studies department and had done advanced graduate work in the social studies.

The unit was designed in cooperation with the participating teacher. A high school social studies teacher and three university professors, all who have expertise in the social studies, served as consultants in the development of the unit.

The teacher presented the unit in the form of factual information, showing historically how minority ethnic groups have contributed favorably to the growth and development of America. The basic teaching technique was teacher presentation followed by class and small group discussions.

Data Analysis and Presentation

All statistically significant changes reported are in the direction of reduced ethnocentrism. The analyses of these data are shown and interpreted in tabular and narrative form.

There was a statistically significant difference between the means of Test I and Test II in Group A, as

shown in Table 3. The difference was significant beyond the .01 level and null hypothesis one was rejected.

TABLE 3

THE SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF TEST I AND TEST II IN GROUP A (N = 71)

Mean		SD	t	Level of Significance
Test I	Test II			
63.82	58.55	12.26	3.63	$P < .01$

Note: t at .01 level = 2.68

The analysis of the difference between the means of Test I and Test II of subjects in Group A displaying high and low ethnocentric attitudes both reveal a significance beyond the .05 level. Therefore, null hypothesis two and three were rejected as indicated in Table 4 and Table 5.

TABLE 4

THE SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF TEST I AND TEST II OF HIGH ETHNOCENTRIC SUBJECTS IN GROUP A (N = 15)

Mean		SD	t	Level of Significance
Test I	Test II			
97.83	88.73	12.96	2.69	$P < .05$

Note: t at .05 level = 2.14

TABLE 5

THE SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF TEST I AND TEST II OF LOW ETHNOCENTRIC SUBJECTS IN GROUP A (N = 56)

Mean		SD	t	Level of Significance
Test I	Test II			
54.68	50.46	12.05	2.61	$P < .05$

Note: t at .05 level = 2.01

The experiment effected marked differences in the attitudinal expressions of the male and female subjects as illustrated in Table 6 and Table 7. The female population expressed a substantial reduction in ethnocentrism and null hypothesis four was rejected.

TABLE 6

THE SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF TEST I AND TEST II OF FEMALE SUBJECTS IN GROUP A (N = 35)

Mean		SD	t	Level of Significance
Test I	Test II			
57.91	51.43	11.17	3.43	$P < .01$

Note: t at .01 level = 2.75

On the other hand, the male population displayed no significant attitudinal change, therefore null hypothesis five was accepted.

Table 7

THE SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF TEST I AND TEST II OF MALE SUBJECTS IN GROUP A (N = 36)

Mean		SD	t	Level of Significance
Test I	Test II			
69.56	65.47	13.18	1.85	P > .05

Note : t at .05 level = 2.04

The expressed prejudical attitudes toward minority ethnic groups by subjects in both IQ groups were reduced drastically as shown in Table 8 and Table 9. The changes were significant beyond the .01 level and null hypotheses six and seven were rejected.

TABLE 8

THE SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF TEST I AND TEST II OF HIGH IQ SUBJECTS IN GROUP A (N = 57)

Mean		SD	t	Level of Significance
Test I	Test II			
59.44	54.91	12.75	2.68	P < .01

Note: t at .01 level = 2.68

TABLE 9

THE SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF TEST I AND TEST II OF LOW IQ SUBJECTS IN GROUP A (N = 14)

Mean		SD	t	Level of Significance
Test I	Test II			
81.64	73.36	9.73	3.19	$P < .01$

Note: t at .01 level = 3.01

The high and low socio-economic subjects reflected contradictory results from the treatment. The treatment induced an expression of reduced ethnocentrism in the subjects operationally defined as the high socio-economic group as shown in Table 10. The reduction was significant beyond the .01 level and null hypothesis eight was rejected.

TABLE 10

THE SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF TEST I AND TEST II OF HIGH SOCIO-ECONOMIC STATUS SUBJECTS IN GROUP A (N = 35)

Mean		SD	t	Level of Significance
Test I	Test II			
58.29	50.37	10	4.68	$P < .01$

Note: t at .01 level = 2.75

The subjects characterized as the low socio-economic background group manifested no attitudinal shifts as illustrated in Table 11. Therefore, null hypothesis nine was accepted.

TABLE 11

THE SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF TEST I AND TEST II OF LOW SOCIO-ECONOMIC STATUS SUBJECTS IN GROUP A (N = 35)

Mean		SD	t	Level of Significance
Test I	Test II			
70.09	67.43	13.83	1.14	P > .05

Note: t at .05 level = 2.04

Since there was no statistically significant difference between the means of the first and second tests in the control group, null hypothesis ten was accepted. These data are presented in Table 12.

TABLE 12

THE SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF TEST I AND TEST II IN GROUP B (N = 36)

Mean		SD	t	Level of Significance
Test I	Test II			
58.06	58.22	8.97	.11	P > .05

Note: t at .05 level = 2.04

Discussion

Based upon the data reported, certain conclusions were made in regard to the study. However, some specific limitations of the study should be kept in mind while reading these conclusions.

The conclusiveness of the findings of the experiment may have been limited to some degree by methodological problems which could not be completely solved in a study of this nature. One such problem could have been the instructional strengths and weaknesses of the participating teacher. Another limiting factor in the study was the possiblility that some of the subjects may have tended to give socially approved responses on the tests.

With these limitations in mind, a summary of the results of this experiment is presented.

1. The presentation of factual information favorable to minority ethnic groups lowered the expressed ethnocentric attitudes of the group.

2. The treatment caused both the high and low ethnocentric groups to become more tolerant in the expression of their feeling toward members of minority ethnic groups.

3. The experiment effected the male and female groups differently. The male population displayed no attitudinal change while the female population expressed a highly significant reduction in ethnocentrism.

4. The expressed prejudicial attitudes toward minority ethnic groups by the high and low IQ groups were substantially reduced as a result of the treatment.

5. The high and low socio-economic groups reflected the varying results of the experimental unit. The treatment induced an expressed significant reduction in ethnocentrism in the high socio-economic group. On the otherhand, the low socio-economic group manifested no significant attitudinal shift.

In conclusion, it seems appropriate to submit some recommendations as a result of questions raised by this investigation.

It appears that it would be beneficial to conduct similar studies utilizing other testing instruments. The social and political pressure against prejudicial attitudes which exist in this society is generally recognized. Therefore, research should be conducted to measure attitudinal formation and change by observing behavioral manifestations. Another facet of this type of research would be to ascertain data regarding the duration of changes in attitudes resulting from experiments of this nature and scope.

Since the treatment in this study dealt mainly with curriculum content it would appear that additional research should be conducted in an effort to determine which types or styles of teaching techniques will induce attitudinal changes most effectively.

Reference

Adorno, T. W., Frenkel-Brunwik, Else, Levinson, D. J., and Sanford, R. N. The Authoritarian Personality. New York: Harper, 1950.